

AMENDMENTS TO THE DRAWINGS

Applicants enclose an the amended figure 14 as submitted in the amendment of October 20, 2005, without the label "Amended", as requested by the Examiner.

REMARKS

Claims 1-14, 47, and 48 are pending in the present application after this amendment adds new claim 48. Applicants submit all changes to the patent being reissued pursuant to 37 CFR § 1.173(b) and (d). However, the enclosed figure 14 includes the amendment of October 20, 2005, but does not include the label "Amended", as requested by the Examiner. The amendments do not add new matter, and are supported throughout the specification and figures. In view of the amendments and the following remarks, reconsideration of the instant application is respectfully requested.

Applicants express their appreciation for the Examiner's assistance in evaluating the claims and prior art in the teleconference between the Examiner and Applicants' representative conducted on June 20, 2006.

REJECTION UNDER 35 U.S.C. § 251

In sections 4 and 5 of the Office Action, the Examiner objects to the reissue oath/declaration as being allegedly defective. Mr. Dexter Chang contacted the Examiner as representative of the Applicants and confirmed that the Examiner did not consider the latest oath/declaration that was filed on October 20, 2005. It is our belief that the Examiner acknowledged that the oath/declaration filed on October 20, 2005 overcomes the Examiner's objection. As such, Applicants respectfully request that the objection be withdrawn.

The revised Reissue Application Declaration By The Inventor, signed by Applicants and submitted in the Amendment filed on October 20, 2005, declares that:

1. Applicants believe the original patent to be partly inoperative or invalid by reason of a defective specification or drawing;

2. Applicants believe the original patent to be partly inoperative or invalid by reason of the patentees claiming less than patentees had the right to claim in the patent

3. Applicants believe the original patent to be partly inoperative or invalid by reason of other errors; and

4. each and every error corrected in the present Reissue application arose without any deceptive intention on the part of Applicants.

Further in accordance with 37 CFR § 1.175(a)(1), Applicants specify at least the error being relied upon as the bases for a broadening reissue in the signed Declaration—namely, that a generic claim encompassing the elected species covered by the claims of the issued patent and one or more non-elected species was mistakenly omitted during the prosecution of the issued patent, thus rendering the issued patent “partly inoperative or invalid by reason of the patentees claiming less than patentees had the right to claim in the patent.” Accordingly, Applicants declare that claim 47 corrects this error.

In view of the foregoing reasons, Applicants respectfully request that the Examiner withdraw the rejection under 35 U.S.C. § 251 for a defective reissue declaration.

OBJECTION TO AMENDED FIGURE 14

In section 6 of the Office Action, the Examiner objects to the figure 14 submitted on October 20, 2005 as having the label “Amended”. Though Applicants respectfully submit that the label “Amended” is required by 37 CFR § 1.173(b)(3), in the interest of expediting prosecution, Applicants submit herewith a copy of the amended figure 13 without the label “Amended”. Therefore, Applicants respectfully request that the objection be withdrawn.

OBJECTIONS TO CLAIMS

In section 7 of the Office Action, the Examiner objects to claims 1-14 and 47 for apparent informalities. Claims 1, 2, 8, and 47 have been amended as suggested by the Examiner, and it is therefore respectfully requested that the objections be withdrawn.

REJECTION OF CLAIM 47

In section 3 of the Office Action, the Examiner asserts that claim 47 is not generic as it now stands, and in particular, the Examiner contends that the alternative language, "any one of," recited in claim 47 does not render claim 47 generic to any of the elected or non-elected species because none of the species include such an alternative. Without conceding the veracity of the Examiner's assertions regarding the allowability of claim 47 as presented, and in the interest of expediting prosecution, claim 47 has been amended to remove the word "any" from before the recitation of the optional language.

It is respectfully submitted that claim 47 as presented is a generic linking claim which properly links the species shown in each of figures 1-6. The Examiner apparently objects to the alternative language of the claim by asserting that none of the figures discloses the alternative inputs to a clock phase detecting section or a difference detecting section, as recited in claim 47. However, the linking claim properly covers the alternatives shown in the different figures. If the Examiner maintains this rejection, Applicants respectfully request legal support for this rejection be shown in either the U.S.C., the C.F.R., or the M.P.E.P.

Regarding the clarification requested by the Examiner in the telephonic interview with respect to the features of claim 47 of the difference detecting unit and the clock phase calculating unit, it is respectfully submitted that these features are recited at least in claim 1 as the error

detecting unit and clock phase calculating unit, respectively. Therefore, claim 47 is generic at least with respect to claim 1. Support for the difference detecting unit may be found in United States Patent No. 5,867,542, of which this application is a reissue, at column 16, line 53 to column 17, line 5. Support for the clock phase calculating unit may be found in United States Patent No. 5,867,542 at column 10, lines 40 and at column 11, lines 21-26. Therefore, it is respectfully submitted that claim 47 is generic to at least one of claims 1-14 and is supported in the specification.

As discussed in previous amendments, the Federal Circuit Court of Appeals has permitted a parentee to file a reissue application to present a so-called linking claim, a claim broad enough to read on or link the invention elected (and parented) together with the invention not elected. In re Doyle, 293 F.3d 1355, U.S.P.Q.2d 1161 (Fed. Cir. 2002). Applicants respectfully maintain that claim 47 is such a linking claim that encompasses both the elected group of the issued claims 1-14 and one or more non-elected species described in the specification.

For instance,

“(i) a combination of demodulated signal which is obtained by demodulating the multilevel orthogonal modulated signal and an equalized demodulated signal...” (emphasis added)

recited in claim 47 includes the elected group covered by claims 1-14 (e.g., “between input and output signals of said equalizing circuit” recited in claim 1), which the Examiner identified as a species illustrated by figure 1 and its corresponding description in the specification. Applicants respectfully submit that the above-cited recitation of claim 47 is generic to the elected species and at least two non-elected species. Applicants further submit that the phrase,

“(ii) a combination of clock phase difference information to be supplied to said identifying circuit and signal error differential information obtained by said identifying circuit, and then supplying said phase component to said clock regenerating circuit,”

recited in claim 47 encompasses at least the remaining non-elected species identified by the Examiner, which are illustrated by figures 4-6, respectively.

The Examiner asserts that claim 47 is not generic, and specifically states that “none of the elected species of issued claims 1-14 includes the claimed subject matter of an equalizing circuit, a difference detecting unit for detecting any one of the criteria (I) and (II)” (Office Action; page 5, lines 17-19). Applicants respectfully disagree, but have amended the claim to recite that the difference detecting unit detects “one of” the signals listed. Each of the issued claims 1-14 recite a detecting unit that detects one of the listed criteria. Specifically, each of the issued claims recites a difference detecting unit that detects difference information between a demodulated signal and an equalized demodulated signal, as recited in claim 47.

Correspondingly, in section 9 of the Office Action, claim 47 stands rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the enablement requirement, and in particular for failing to comply with the enablement requirement because the specification allegedly does not enable one skilled in the art to implement the claimed alternatives. The Examiner contends that the specification does not provide an adequate disclosure to enable one skilled in the art to practice a receiver circuit that includes “any one of” the alternatives in one embodiment. However, as discussed above, Applicants submit that the alternative language presented in claim 47 is a proper generic claim which covers the embodiments shown in figures 1-6. Furthermore, the claim is supported in figures 1-6, as well as throughout the specification, and in particular in the sections cited above in support of the specific features identified by the

Examiner in the teleconference of June 20, 2006. It is therefore respectfully submitted that this claim is enabled by the figures and the accompanying description in the specification.

NEW CLAIM 48

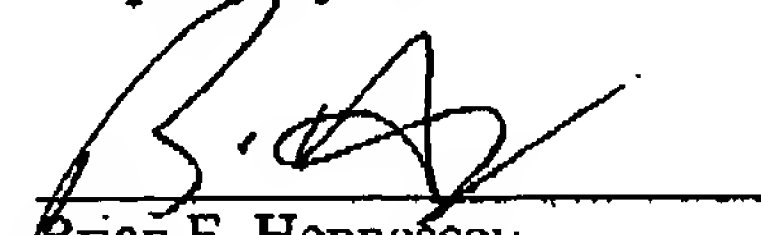
New claim 48 recites that clock-phase-detecting composite input information includes a combination of the demodulated signal which is obtained by demodulating the multilevel orthogonal modulated signal and an equalized demodulated signal. Furthermore, new claim 48 recites that a difference detecting unit detects difference information between the demodulated signal and the equalized demodulated signal. It is respectfully submitted that this claim is generic to figures 1-3 of the present application, and therefore is a generic linking claim that could have properly been pursued in the original application.

CONCLUSION

In view of the remarks set forth above, this application is in condition for allowance which action is respectfully requested. However, if for any reason the Examiner should consider this application not to be in condition for allowance, the Examiner is respectfully requested to telephone the undersigned attorney at the number listed below prior to issuing a further Action.

Any fee due with this paper may be charged to Deposit Account No. 50-1290.

Respectfully submitted,


Brian E. Hennessey
Reg. No. 51,271

CUSTOMER NO.: 026304

Phone No.: (212) 940-6311

Fax No.: (212) 940-8986 or 8987

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